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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/481,766	TRAMONTANO, ROBERT J.
	Examiner	**Art Unit**
	Cam-Y T Truong	2172

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. .
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>24 October 2003</u> .

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>36-41</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>36-41</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)   4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)   5) ☐ Notice of Informal Patent Application (PTO-152)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .   6) ☐ Other: .

DETAILED ACTION

1.   Applicant has canceled claims 1 and 3-35 and added claims 36-41 in the

amendment filed on 10/24/03. Claims 36-41 are pending in this Office Action.

Applicant's arguments with respect to claims 36-41 have been considered but are

moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

3.   Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Du et al

(or hereinafter "Du") (USP 5412806) in view of Melchione et al (or hereinafter

"Melchione") (USP 5930764).

As to claim 36, Du teaches the claimed limitations:

"a first ATM including (i) at least one data storage device, and (ii) a relational

database management system for maintaining a relational database which is stored on

the data storage device, and which contains information about each customer in a first

set of customers who frequent the first ATM to conduct transactions at the first ATM" as

the term distributed database management systems involving multiple computer sites,

each with a local database connected together in a communication network, in which a

user at any site can access data stored at any other side. The example represents a

simple distributed banking system with two sites, for example, one in Portland, Oreg.

and one in Washington, D.C Of course, real distributed systems usually involved more than just two sites. But suppose account records for the Washington, D.C. area are stored in a local database at the D.C. site, while account records for the Oregon area are stored in a local database at the Portland side. The system in Du also provides the ability to store, maintain and modify data in a multi-machine, multi-database network independent of the make or particular nuances of the individual database management sub-systems 12, 13A, etc., of 1 using standard structured query language queries. The system uses standard structured query language queries for the databases, which are stored in these two sites. Therefore, these databases are relational databases. The above information shows that users can access data stored at any other side of a distributed banking system. Thus, it obvious that these two databases store information for these users and these users frequently visit the two sides for updating information. The one in Portland, oreg is represented as the first ATM (col. 1, lines 20-50; col. 8, lines 10-15).

"a second ATM including (i) at least one data storage device, and (ii) a relational database management system for maintaining a relational database which is stored on the data storage device, and which contains information about each customer in a second set of customers who frequent the second ATM to conduct transactions at the second ATM" as the term distributed database management systems involving multiple computer sites, each with a local database connected together in a communication network, in which a user at any site can access data stored at any other side. The example represents a simple distributed banking system with two sites, for example,

one in Portland, Oreg. and one in Washington, D.C. Of course, real distributed systems usually involved more than just two sites. But suppose account records for the Washington, D.C. area are stored in a local database at the D.C. site, while account records for the Oregon area are stored in a local database at the Portland side. The system in Du also provides the ability to store, maintain and modify data in a multi-machine, multi-database network independent of the make or particular nuances of the individual database management sub-systems 12, 13A, etc. of fig 1 using standard structured query language queries. The system uses standard structured query language queries for the databases, which are stored in these two sites. Therefore, these databases are relational databases. The above information shows that users can access data stored at any other side of a distributed banking system. Thus, it obvious that these two databases store information for these users and these users frequently visit the two sides for updating information. The one in Washington, D.C is represented as the second ATM (col. 1, lines 20-50; col. 8, lines 10-15);

"a transaction processing system for (i) processing transactions conducted by the first set of customers at the first ATM" as the system allows a user can access data stored at any other site because a given account record could be stored in both the D.C. and Portland databases. In case, when a user access a account record at the D.C, the account record at the D.C is represented as the first set of users. The above information shows that the system has included a transaction processing system to process user's accessing (col. 1, lines 20-25; col. 2, lines 55-60);

"(ii) processing transactions conducted by the first set of customers at the second

ATM" as the system allows a user can access data stored at any other site because a

given account record could be stored in both the D.C. and Portland databases. In case,

when a user accesses an account record at the Porland database, the account record

at the Porland database is represented as the second set of users. The above

information shows that the system has included a transaction processing system to

process user's accessing (col. 1, lines 20-25; col. 2, lines 55-60);

"(iii) processing transactions conducted by the second set of customers at the

first ATM" as the system allows a user can access data stored at any other site because

a given account record could be stored in both the D.C. and Portland databases. In

case, when a user access a account record at the D.C, the account record at the D.C is

represented as the first set of users. When a user accesses an account record at

Portland database, the account record at Portland database is represented as the

second set of users. Since the system allows data to be moved from one site to

another as usage patterns change. In case, the system moves data account at Portland

database from Portland site to D.C site, the system processes the account at Portland

database at D.C site (col. 1, lines 20-50; col. 2, lines 15-57),

"and (iv) processing transactions conducted by the second set of customers at

the second ATM" as the system allows a user can access data stored at any other site

because a given account record could be stored in both the D.C. and Portland

databases. In case, when a user access a account record at the D.C, the account

record at the D.C is represented as the first set of users. When a user accesses an

account record at Portland database, the account record at Portland database is

represented as the second set of users. Since the system allows data to be moved

from one site to another as usage patterns change. In case, the system moves data

account at database from D.C site to Portland site, the system processes the account at

D.C database at Portland site (col. 1, lines 20-50; col. 2, lines 15-57),

",(ii) means for transmitting to the first ATM information about: any transaction

conducted by the first set of customers at the second ATM, and (iii) means for

transmitting to the second ATM information about any transaction conducted by the

second set of customers at the first ATM" as the system allows a user can access data

stored at any other site because a given account record could be stored in both the D.C.

and Portland databases. In case, when a user access a account record at the D.C, the

account record at the D.C is represented as the first set of users. When a user

accesses an account record at Portland database, the account record at Portland

database is represented as the second set of users. Since the system allows data to be

moved from one site to another as usage patterns change. In case, the system moves

data account at database from D.C site to Portland site, the system processes the

account at D.C database at Portland site. The system allows a user can access data

stored at any other site because a given account record could be stored in both the D.C.

and Portland databases. In case, when a user access a account record at the D.C, the

account record at the D.C is represented as the first set of users. When a user

accesses an account record at Portland database, the account record at Portland

database is represented as the second set of users. Since the system allows data to be

moved from one site to another as usage patterns change. In case, the system moves data account at database from D.C site to Portland site, the system processes the account at D.C database at Portland site (col. 1, lines 20-50; col. 2, lines 15-57).

Du does not explicitly teach the claimed limitation "a data warehouse including (i) means for collecting and storing customer information from each transaction processed by the transaction processing system". Melchione teaches central database 10 is comprehensive and enriched database that include information about all customers and products in the financial institution including branch products, bank cards, travel and entertainment cards, student loans and mortgage products (col. 11, lines 40-60).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Melchione's teaching of the central database 10 is comprehensive and enriched database that include information about all customers and products in the financial institution including branch products, bank cards, travel and entertainment cards, student loans and mortgage products. The system in Melchione provides searching this database in response to structured queries to Du's system in order to allow users to access or search/retrieve their information directly through Internet and to create copies of users' databases for future processing when the system is corrupted.

4.   Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Du et al (or hereinafter "Du") (USP 5412806) in view of Melchione et al (or hereinafter "Melchione") (USP 5930764) and further in view of Buchanan (USP 5758355).

As to claim 37, Du discloses the claimed limitation subject matter in claim 36,

except the claimed limitation "wherein each of the ATMs includes means for capturing

detailed data about a customer's interaction for use both locally at the ATM and globally

at the data warehouse". However, Buchanan teaches the server database is updated

with information entered on the client computers and conversely the client·computers

are updated with new information entered on the server computer. The different client

databases are synchronized with the server database through separate bi-directional

synchronization processes (col. 4, lines 30-40).

It would have been obvious to a person of an ordinary skill in the art at the time

the invention was made to apply Buchanan's teaching of the server database is updated

with information entered on the client computers and conversely the client computers

are updated with new information entered on the server computer. The different client

databases are synchronized with the server database through separate bi-directional

synchronization processes to Du's system in order to allow a user to search/retrieve

updated data in different sites.

5.   Claims 38-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Du

et al (or hereinafter "Du") (USP 5412806) in view of Buchanan (USP 5758355) and

Drummond et al (or hereinafter "Drummond") (USP 6505177).

As to claim 38, Du teaches the claimed limitations:

"a first ATM including a data storage device and a relational database

management system for maintaining a relational database stored on the data storage

device, the relational database containing customer information about a first set of

customers, where each customer in the first set of customers frequents the first ATM"

as " as the term distributed database management systems involving multiple computer

sites, each with a local database connected together in a communication network, in

which a user at any site can access data stored at any other side. The example

represents a simple distributed banking system with two sites, for example, one in

Portland, Oreg. and one in Washington, D.C. Of course, real distributed systems usually

involved more than just two sites. But suppose account records for the Washington,

D.C. area are stored in a local database at the D.C. site, while account records for the

Oregon area are stored in a local database at the Portland side. The system in Du also

provides the ability to store, maintain and modify data in a multi-machine, multi-

database network independent of the make or particular nuances of the individual

database management sub-systems 12, 13A, etc., of 1 using standard structured query

language queries. The system uses standard structured query language queries for the

databases, which are stored in these two sites. Therefore, these databases are

relational databases. The above information shows that users can access data stored at

any other side of a distributed banking system. Thus, it obvious that these two

databases store information for these users and these users frequently visit the two

sides for updating information. The one in Portland, oreg is represented as the first

ATM (col. 1, lines 20-50; col. 8, lines 10-15);

"a second ATM including a data storage device and a relational database

management system for maintaining a relational database stored on the data storage

device, the relational database containing information about a second set of customers,

where each customer in the second set of customers frequents the second ATM" as

the term distributed database management systems involving multiple computer sites,

each with a local database connected together in a communication network, in which a

user at any site can access data stored at any other side. The example represents a

simple distributed banking system with two sites, for example, one in Portland, Oreg.

and one in Washington, D.C. Of course, real distributed systems usually involved more

than just two sites. But suppose account records for the Washington, D.C. area are

stored in a local database at the D.C. site, while account records for the Oregon area

are stored in a local database at the Portland side. The system in Du also provides the

ability to store, maintain and modify data in a multi-machine, multi-database network

independent of the make or particular nuances of the individual database management

sub-systems 12, 13A, etc. of fig 1 using standard structured query language queries.

The system uses standard structured query language queries for the databases, which

are stored in these two sites. Therefore, these databases are relational databases. The

above information shows that users can access data stored at any other side of a

distributed banking system. Thus, it obvious that these two databases store information

for these users and these users frequently visit the two sides for updating information.

The one in Washington, D.C is represented as the second ATM (col. 1, lines 20-50; col.

8, lines 10-15);

"a transaction processing system for processing transactions conducted at the

first and second ATMs" as the term distributed database management systems

involving multiple computer sites, each with a local database connected together in a

communication network, in which a user at any site can access data stored at any other

side. The example represents a simple distributed banking system with two sites, for

example, one in Portland, Oreg. and one in Washington, D.C. Of course, real distributed

systems usually involved more than just two sites. But suppose account records for the

Washington, D.C. area are stored in a local database at the D.C. site, while account

records for the Oregon area are stored in a local database at the Portland side. The

system in Du also provides the ability to store, maintain and modify data in a multi-

machine, multi-database network independent of the make or particular nuances of the

individual database management sub-systems 12, 13A, etc. of fig 1 using standard

structured query language queries. The system uses standard structured query

language queries for the databases, which are stored in these two sites. Therefore,

these databases are relational databases. The above information shows that users can

access data stored at any other side of a distributed banking system. Thus, it obvious

that these two databases store information for these users and these users frequently

visit the two sides for updating information. The one in Washington, D.C is represented

as the second ATM (col. 1, lines 20-50; col. 8, lines 10-15).

Du does not explicitly teach the claimed limitation "and a data warehouse

including (i) means for communicating with the transaction processing system to

retrieve transactions executed at the first and second ATMs, and (ii) means for

synchronizing customer information between the data warehouse and each of the first

and second ATMs thereby enabling the first ATM to obtain information about

transactions conducted by the first set of customers at the second ATM; and enabling

the second ATM to obtain information about transactions conducted by the second set

of customers at the first ATM". Bauer teaches that the central database 12 can be

modified by users to insert, update and delete rows, columns and filed. This central

database stores each client local database 22a, 22x and 22z of client computers. The

database synchronizer is used to synchronize the data in the central database with the

data on each client's computer. The above information shows that the system retrieves

data in the central database and synchronizes retrieved data between central database

12 with databases of clients (col. 1, lines 65-67; col. 2, lines 1-5; col. 6, lines 60-67).

It would have been obvious to a person of an ordinary skill in the art at the time

the invention was made to apply Bauer's teaching of synchronizing data between the

central database and databases of clients to Du's system in order to avoid conflict data

records between sites during a user makes any transaction and allow a user to

search/retrieve database records at any side within interconnected computer networks

As to claim 39, Du teaches the claimed limitations:

"(ii) a local data storage device which stores a local relational database which

stores customer-specific information each time the ATM customer frequents this ATM to

carry out an ATM transaction at this ATM, (iii) an executable local relational database

management system (RDBMS) for, when executed, updating the customer-specific

information stored in the local relational database stored in the local data storage device

of this ATM, and (iv) a local processor for executing the RDBMS to update the customer

specific information stored in the local relational database stored in the local data

storage device of this ATM each time the ATM customer carries out an ATM transaction

at this ATM" as the term distributed database management systems involving multiple

computer sites, each with a local database connected together in a communication

network, in which a user at any site can access data stored at any other side. The

example represents a simple distributed banking system with two sites, for example,

one in Portland, Oreg. and one in Washington, D.C. Of course, real distributed systems

usually involved more than just two sites. But suppose account records for the

Washington, D.C. area are stored in a local database at the D.C. site, while account

records for the Oregon area are stored in a local database at the Portland side. The

system in Du also provides the ability to store, maintain and modify data in a multi-

machine, multi-database network independent of the make or particular nuances of the

individual database management sub-systems 12, 13A, etc., of 1 using standard

structured query language queries. The system uses standard structured query

language queries for the databases, which are stored in these two sites. Therefore,

these databases are relational databases. The above information shows that users can

access data stored at any other side of a distributed banking system. Thus, it obvious

that these two databases store information for these users and these users frequently

visit the two sides for updating information. The one in Portland, oreg is represented as

the first ATM (col. 1, lines 20-50; col. 8, lines 10-15),

        " (ii) a local data storage device which stores a local relational database which

stores customer-specific information each time the ATM customer frequents this ATM to

carry out an ATM transaction at this ATM, (iii) an executable local relational database

management system (RDBMS) for, when executed, updating the customer-specific

information stored in the local relational database stored in the local data storage device

of this ATM, and (iv) a local processor for executing the RDBMS to update the customer

specific information stored in the local relational database stored in the local data,

storage device of this ATM each time the ATM customer carries out an ATM transaction

at this ATM" as   the term distributed database management systems involving multiple

computer sites, each with a local database connected together in a communication

network, in which a user at any site can access data stored at any other side. The

example represents a simple distributed banking system with two sites, for example,

one in Portland, Oreg. and one in Washington, D.C. Of course, real distributed systems

usually involved more than just two sites. But suppose account records for the

Washington, D.C. area are stored in a local database at the D.C. site, while account

records for the Oregon area are stored in a local database at the Portland side. The

system in Du also provides the ability to store, maintain and modify data in a multi-

machine, multi-database network independent of the make or particular nuances of the

individual database management sub-systems 12, 13A, etc. of fig 1 using standard

structured query language queries. The system uses standard structured query

language queries for the databases, which are stored in these two sites. Therefore,

these databases are relational databases. The above information shows that users can

access data stored at any other side of a distributed banking system. Thus, it obvious

that these two databases store information for these users and these users frequently

visit the two sides for updating information. The one in Washington, D.C is represented as the second ATM (col. 1, lines 20-50; col. 8, lines 10-15);

"a transaction processing system for processing each ATM transaction carried out by the ATM customer at the first ATM and for processing each ATM transaction carried out by the ATM customer at the second ATM" as the term distributed database management systems involving multiple computer sites, each with a local database connected together in a communication network, in which a user at any site can access data stored at any other side. The example represents a simple distributed banking system with two sites, for example, one in Portland, Oreg. and one in Washington, D.C. Of course, real distributed systems usually involved more than just two sites. But suppose account records for the Washington, D.C. area are stored in a local database at the D.C. site, while account records for the Oregon area are stored in a local database at the Portland side. The system in Du also provides the ability to store, maintain and modify data in a multi-machine, multi-database network independent of the make or particular nuances of the individual database management sub-systems 12, 13A, etc. of fig 1 using standard structured query language queries. The system uses standard structured query language queries for the databases, which are stored in these two sites. Therefore, these databases are relational databases. The above information shows that users can access data stored at any other side of a distributed banking system. Thus, it obvious that these two databases store information for these users and these users frequently visit the two sides for updating information. The one in

Washington, D.C is represented as the first ATM. The one in Portland site is represented as the second ATM (col. 1, lines 20-50; col. 8, lines 10-15).

Du does not explicitly teach the claimed limitation "and a data warehouse system including (i) means for uploading from the local data storage device of the first ATM at least some customer-specific information associated with ATM transactions which have been carried out by the ATM customer at the first ATM, and (ii) means for downloading to the local data storage device of the second ATM the at least some customer-specific information which has been uploaded from the local data storage device of the first ATM to update the customer-specific information stored in the local relational database stored in the local data storage device of the second ATM so that the ATM customer can be more effectively served at the second ATM when the ATM customer carries out an ATM transaction in the future at the second ATM" as the two sites are linked together to form a single global database. The system alos allows data to be moved from one site to an; a first ATM including (i) means for receiving a card from an ATM customer to identify the ATM customer before allowing the ATM customer to carry out an ATM transaction at this ATM; a second ATM including (i) means for receiving a card from the ATM customer to identify the ATM customer before allowing the ATM customer to carry out an ATM transaction at this ATM". Buchanan teaches the server database is updated with information entered on the client computers and conversely the client computers are updated with new information entered on the server computer. The different client databases are synchronized with the server database through separate bi-directional synchronization processes (col. 4, lines 30-40).

Drummond teaches that customer PIN verification may be carried out in the ATM

through an appropriate applet. This can be done in situations where data on a

customer's card such an account number, can be correlated to the customer's Pin

number through algorithm. The networks interconnect ATMs operated by financial

institutions and other entities. Thus, the customer PIN or card verification may be

carried out in all ATMs (col. 1, lines 45-55; col. 15, lines 30-37).

It would have been obvious to a person of an ordinary skill in the art at the time

the invention was made to apply Buchanan's teaching of the server database is updated

with information entered on the client computers and conversely the client computers

are updated with new information entered on the server computer. The different client

databases are synchronized with the server database through separate bi-directional

synchronization processes and Drummond's teaching of customer PIN verification may

be carried out in the ATMs through an appropriate applet. This can be done in

situations where data on a customer's card such an account number, can be correlated

to the customer's Pin number through algorithm to Du's system in order to prevent

users to update databases from different sites in a distributed system without

permission.

As to claim 40, Du teaches the claimed limitations:

"a local data storage device which stores a local relational database which stores

customer-specific information each time the ATM customer frequents this ATM to carry

out an ATM transaction al. this ATM, (iii) an executable local relational database

management system (RDBMS) for, when executed, updating the customer-specific

information stored in the local relational database stored in the local data storage device

of this ATM, and (iv) a local processor for executing the RDBMS to update the customer

specific information stored in the local relational database stored in the local data

storage device of this ATM each time the ATM customer carries out an ATM transaction

at this ATM" as the term distributed database management systems involving multiple

computer sites, each with a local database connected together in a communication

network, in which a user at any site can access data stored at any other side. The

example represents a simple distributed banking system with two sites, for example,

one in Portland, Oreg. and one in Washington, D.C. Of course, real distributed systems

usually involved more than just two sites. But suppose account records for the

Washington, D.C. area are stored in a local database at the D.C. site, while account

records for the Oregon area are stored in a local database at the Portland side. The

system in Du also provides the ability to store, maintain and modify data in a multi-

machine, multi-database network independent of the make or particular nuances of the

individual database management sub-systems 12, 13A, etc., of 1 using standard

structured query language queries. The system uses standard structured query

language queries for the databases, which are stored in these two sites. Therefore,

these databases are relational databases. The above information shows that users can

access data stored at any other side of a distributed banking system. Thus, it obvious

that these two databases store information for these users and these users frequently

visit the two sides for updating information. The one in Portland, oreg is represented as the first ATM (col. 1, lines 20-50; col. 8, lines 10-15).

Du does not explicitly teach the claimed limitations "a first ATM including (i) means for receiving a card from an ATM customer to identify the ATM customer before allowing the ATM customer to carry out an ATM transaction at this ATM, and (ii) means for providing customer-specific information associated with the ATM transaction when the ATM customer carries out the ATM transaction at this ATM;

a second ATM including (i) means for receiving a card from the ATM customer to identify the ATM customer before allowing the ATM customer to carry out an ATM transaction at this ATM, (ii) a transaction processing system for processing each ATM transaction carried out by the ATM customer at the first ATM and for processing each ATM transaction carried out by the ATM customer at the second ATM;

and a data warehouse system including (i) means for retrieving from the first ATM the customer-specific information associated with the ATM transaction which has been carried out by the ATM customer at the first ATM, and (ii) means for downloading to the local data storage device of the second ATM the at customer-specific information which has been retrieved from the first ATM to update the customer-specific information stored in the local relational database stored in the local data storage device of the second ATM so that the ATM customer can be more effectively served at the second ATM when the ATM customer carries out an ATM transaction in the fixture at the second ATM".

However, Buchanan teaches the server database is updated with information entered on the client computers and conversely the client computers are updated with new information entered on the server computer. The different client databases are synchronized with the server database through separate bi-directional synchronization processes (col. 4, lines 30-40). Drummond teaches that customer PIN verification may be carried out in the ATM through an appropriate applet. This can be done in situations where data on a customer's card such an account number, can be correlated to the customer's Pin number through algorithm. The networks interconnect ATMs operated by financial institutions and other entities. Thus, the customer PIN or card verification may be carried out in all ATMs (col. 1, lines 45-55; col. 15, lines 30-37).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Buchanan's teaching of the server database is updated with information entered on the client computers and conversely the client computers are updated with new information entered on the server computer. The different client databases are synchronized with the server database through separate bi-directional synchronization processes and Drummond's teaching of customer PIN verification may be carried out in the ATMs through an appropriate applet. This can be done in situations where data on a customer's card such an account number, can be correlated to the customer's Pin number through algorithm to Du's system in order to prevent users to update databases from different sites in a distributed system without permission.

6.   Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Du et al

(or hereinafter "Du") (USP 5412806) in view of Drummond et al (or hereinafter

"Drummond") (USP 6505177).

As to claim 41, Du teaches the claimed limitations:

"at least one local data storage device which stores a local relational database

which stores information on each ATM customer that frequents this ATM to carry out an

ATM transaction so that each of these ATM customers can be more effectively served

whenever the particular ATM customer carries out an ATM transaction at this ATM; and

an executable local relational database management system (RDBMS) for, when

executed, maintains the local relational database" as the term distributed database

management systems involving multiple computer sites, each with a local database

connected together in a communication network, in which a user at any site can access

data stored at any other side. The example represents a simple distributed banking

system with two sites, for example, one in Portland, Oreg. and one in Washington, D.C.

Of course, real distributed systems usually involved more than just two sites. But

suppose account records for the Washington, D.C. area are stored in a local database

at the D.C. site, while account records for the Oregon area are stored in a local

database at the Portland side. The system in Du also provides the ability to store,

maintain and modify data in a multi-machine, multi-database network independent of

the make or particular nuances of the individual database management sub-systems

12, 13A, etc., of 1 using standard structured query language queries. The system uses

standard structured query language queries for the databases, which are stored in

these two sites. Therefore, these databases are relational databases. The above
information shows that users can access data stored at any other side of a distributed
banking system. Thus, it obvious that these two databases store information for these
users and these users frequently visit the two sides for updating information. The one in
Portland, oreg is represented as the first ATM (col. 1, lines 20-50; col. 8, lines 10-15).

Du does not explicitly teach the claimed limitation "means for receiving a card
from an ATM customer to validate identity of the ATM customer before allowing the
ATM customer to carry out an ATM transaction". Drummond teaches that customer PIN
verification may be carried out in the ATM through an appropriate applet. This can be
done in situations where data on a customer's card such an account number, can be
correlated to the customer's Pin number through algorithm. The networks interconnect
ATMs operated by financial institutions and other entities. Thus, the customer PIN or·
card verification may be carried out in all ATMs (col. 1, lines 45-55; col. 15, lines 30-37).

It would have been obvious to a person of an ordinary skill in the art at the time
the invention was made to apply Drummond's teaching of customer PIN verification may
be carried out in the ATMs through an appropriate applet. This can be done in
situations where data on a customer's card such an account number, can be correlated
to the customer's Pin number through algorithm to Du's system in order to prevent
users to update databases from different sites in a distributed system without
permission.

Conclusion

7.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure

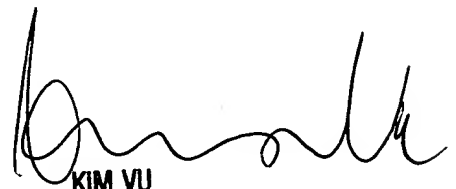Carothers et al (USP 6587857).

Contact Information

8.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Cam-Y Truong whose telephone number is (703-605-

1169). The examiner can normally be reached on Mon-Fri from 8:00AM to 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kim Vu, can be reached on (703-305-4393). The fax phone numbers for the

organization where this application or proceeding is assigned is (703-308-9051).

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is (703-305-

3900).

CY

11/13/03

KIM VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100